



Dr. Jigyasa Sandilya

Assistant Professor

Institute of Economic Growth
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Research Interests

Climate and Environmental Economics, Agricultural Economics, and Development Economics

Employment History

- June 2026–Present **Assistant Professor on Project,**
Project title: Economic and Health Impact Assessment of Heat Adaptation Action: Case Studies from India
Institute: Institute of Economic Growth, Delhi, India
Sponsor: Wellcome Trust
- 2019–2021 **Research Associate,**
Institute: Indian Institute of Technology Kharagpur, Kharagpur, India
Project title: Economic Viability, Value Chain Analysis, and Micro-entrepreneurial Development for Selected Crop Varieties with Medicinal Values in North East India
PI: Prof. Kishor Goswami
Sponsor: ICSSR (IMPRESS)

Education

- 2020–2026 **PhD (Economics),**
Institute: Indian Institute of Technology Kharagpur, Kharagpur, India
Thesis: Perception of Climate Change and Adoption of Climate-Smart Agriculture among Smallholder Farmers in Assam, India
- 2017–2019 **M.A. Economics,** Cotton University, Guwahati, Assam, India
- 2014–2017 **B.Sc.,** Cotton University, Guwahati, Assam, India
Economics (Honors), Mathematics, Statistics

Research Publications

Journal articles

- [1] **J. Sandilya** and K. Goswami, *Multilevel drivers of smallholder farmers' coping strategies to climate variability: Insights from Assam, India*, *Ecological Economics*, vol. 245, pp. 1–11, 2026
- [2] **J. Sandilya** and K. Goswami, *Perception, bias, and adaptation: Role of indigenous knowledge in dual climate-stressed farming communities of Assam, India*, *Environmental Development*, vol. 56, pp. 1–14, 2025
- [3] K. Goswami, N. Deka, **J. Sandilya**, and D. B. Thapa, *From value chain to value networks: Inferences for local development from the kiwifruit sector in Eastern Himalayan Region, India*, *Applied Geography*, vol. 181, pp. 1–15, 2025
- [4] **J. Sandilya** and K. Goswami, *Effect of different forms of capital on the adoption of multiple climate-smart agriculture strategies by smallholder farmers in Assam, India*, *Mitigation and Adaptation Strategies for Global Change*, vol. 29, pp. 1–23, 2024
- [5] K. Goswami, D. B. Thapa, **J. Sandilya**, and N. Deka, *An assessment of economic profitability of black rice (Oryza sativa L. indica) production in Assam, India*, *Journal of Applied Research on Medicinal and Aromatic Plants*, vol. 34, pp. 1–8, 2023

Field experience

- Mar'23 — June'23 **Primary survey**, Primary data collection of 600 farmers from three districts of Assam, India. Personal interviews, and focused group discussions were conducted.
- Jan'23 **Pilot survey**, Pilot survey conducted at Goalpara district, Assam.
- Nov'20 — Jan'21 **Primary survey**, Primary data collection of 300 farmers from two districts each in Assam and Arunachal Pradesh, India.
- Dec'19 **Pilot survey**, Pilot survey conducted at Dirang, Arunachal Pradesh and Goalpara, Assam.

Teaching Experience

- 2022–2025 **Teaching Assistant**, Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur
- Development Economics (Undergraduate students), spring semester(s) (2023-2025):
 - Conducted 2-3 lectures per semester, led tutorial classes, and provided assessment support,
 - Provided detailed feedback on students' oral presentations and internal assignments.
 - Business Economics (Postgraduate and PhD coursework students), autumn semester(s) (2022-2024):
 - Delivered 2–3 lectures per semester, conducted case-study sessions, and provided assessment support,
 - Facilitated advanced tutorial classes on microeconomic theories and linear programming, combining graphs with mathematical exercises.

Academic Achievements

Academic Distinctions

- June 2019 **NTA-UGC**, Qualified NTA-UGC test for Eligibility for Assistant Professor (Economics)
- 2019 **Ranked 1st Class 2nd**, Department of Economics, Cotton University, while pursuing Master of Arts.
- 2017 **Ranked 1st Class 1st (Gold Medalist)**, Department of Economics, Cotton University, while pursuing Bachelor of Science.

Fellowships/Scholarships

- 2024 **Indian Council of Social Science Research (ICSSR)**, Received international travel grant to present a paper at the 4th Development Economic Conference, University of Lincoln, UK
- 2018 **University Grants Commission (UGC)**, Received PG Scholarship for University rank holders for performance during Bachelor's degree.

Conferences Attended

- Mar 07-09, 5th World Conference on Climate Change and Global Warming, Vienna, Austria
2025 Paper presentation: "Adoption of crop insurance as a risk-transfer mechanism among smallholder farmers: A micro-level study in Assam, India"
- Dec 09-13, American Geophysical Union (AGU) Fall Meeting 2024
2024 I-Poster presentation: "Challenges in the adoption of climate-smart agriculture (CSA) technologies: The interplay of agricultural risks and floods"
- Nov 23-25, 94th Annual Meeting of the Southern Economic Association (SEA), Washington DC, USA
2024 Paper presentation: "Effect of climate extremes on climate change perception and smallholders' adoption of coping strategies in Assam"
- June 24-26, 4th Development Economics Conference (DEC), University of Lincoln, Lincoln, UK
2024 Paper presentation: "External aid and the intensity of Climate-Smart Agriculture (CSA) adoption among smallholder farmers: A study in a major flood-prone region of India"
- Oct 10-11, Asian Development Bank Institute (ADBI) Virtual Conference
2023 Paper presentation: "Factors affecting adoption of climate-smart agriculture among smallholder farmers in Assam, India"

Podcast Interview

- 2024 Invited for a podcast interview, *A Climate of Change*, to translate findings from my thesis for non-academic audiences (e.g., policymakers, public, extension agencies, and NGOs)

Academic Service

Journal Article Reviewing

- Mar 2026 Reviewed a manuscript for the "Journal of Agribusiness in Developing and Emerging Economies"
- Dec 2025 Reviewed a manuscript for "Climate and Development"

Position of Responsibility

- June 17-21, **Student Secretary**, for a workshop titled "An Introduction to Modern Microeconometrics: A Simulation-Based Approach" by Dr. David M. Drukker, Clemson University, USA.

Certifications

- Jan 19-Feb 20, 2026* Department of Humanities, Arts and Social Sciences, NIT Calicut
Faculty Development Program: "Economic Well-Being Through Data- All India's Debt and Investment Survey 2019 (Statistical Analysis Using NSSO Unit Level Data)"
- May 12-July 14, 2025* IZA/FCDO G²LM|LIC Development Economics Course 2025
Online Course: "Development Economics Course"
- Apr 11, 2025* World Bank Group
Online Course: "Reproducible Research Fundamentals"
- Nov 14, 2024* World Bank Group
Online Course: "Manage Successful Field Research"
- July 10-14, 2023* Indian Statistical Institute, Kolkata
Training Program: "Earth Observation (EO) Data Analytics for Disaster Management Focusing on Flood and Drought"
- July 09-30, 2021* Hertie School Data Science Lab
Online Course: "Data Science Summer School 2021"
- Sep 08, 2020* Coursera- Johns Hopkins University
Online Course: "The Data Scientist's Toolbox"
- July 04, 2020* Coursera- Yale University
Online Course: "Financial Markets"

Skills

- Technical* Stata, R, Microsoft Suite, QGIS, Inkscape
Creative Dance, Playing Guitar

Languages

English, Assamese, Hindi